

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) Method—~~A method of converting a series of m-bit information words (1) to a modulated signal (7), with m being an integer, in which said method comprising the steps of: converting each received information word into an a corresponding n-bit code word (4) is delivered for each received information word (1), with n being an integer exceeding m, and modulating the corresponding delivered code words (4) are modulated to form the modulated signal (7), and in which wherein the converting step converts the series of information words is converted to a series of corresponding code words so that the corresponding modulated signal (7) satisfies a predetermined criterion, and in which wherein the corresponding code words (4) are spread over at least a group of a first type (G11, G12) and at least a group of a second type (G2), while the delivery of a code word belonging to the group of the first type (G11, G12) establishes a coding state (S1) of a first type determined by the associated group, and the delivery of a code word belonging to the group of the second type (G2) establishes one of r coding states (S2, S3) of a second type determined by the associated group and by the information word (1) associated to the delivered code word (4), in which the group of the second type comprises at least one code word being associated with at most r information words among which~~

the respective information word is distinguishable by evaluating a  
25 predetermined parameter of the following code word,  
characterized in that

30 said step of converting each information word comprises the sub-  
steps:

35 providing each information word as provided with an  
associated subset of code words comprising at least r code words  
mutually differing in the value of the predetermined parameter, ;  
and

40 selecting the delivered corresponding code word as  
selected based on an additional criterion from the subset of code  
words excluding all code words not complying with said  
predetermined criterion and, in the event that a coding state of  
the second type has been established by the preceding code word,  
excluding all code words having a value of the predetermined  
parameter not corresponding to the established coding state of the  
second type.

2. (Currently Amended) ~~The method~~ as claimed in claim  
1, wherein the additional criterion is controlling a low frequency  
content of the modulated signal.

3. (Currently Amended) ~~The method~~ as claimed in Claim  
2, wherein a running digital sum value is established as a measure  
for the low frequency content, which ~~said running digital sum value~~  
~~is being~~ determined over a portion of the modulated signal (7) and

5 | denotes, for this portion, the current value of a difference  
| between the number of bit cells having a first signal value and the  
| number of bit cells having a second signal value, while said  
| selection of the code word is made so as to constrain the digital  
| sum value.

| 4. (Currently Amended) ~~Method~~—The method as claimed in claim  
| 1, wherein the value of the predetermined parameter is the logical  
| value of p predetermined bits.

| 5. (Currently Amended) ~~Method~~—The method as claimed in claim  
| 4, wherein the p predetermined bits are the first and thirteenth  
| bit position.

| 6. (Currently Amended) ~~Method~~—The method as claimed in claim  
| 1, wherein the additional criterion is encoding further  
| information.

| 7. (Currently Amended) ~~Method~~—The method as claimed in Claim  
| 1, wherein the modulated signal satisfies as the predetermined  
| criterion that each number of successive bit cells having a same  
| signal value is at least d+1 and at most k+1.

| 8. (Currently Amended) ~~Method~~—The method as claimed in Claim  
| 7, wherein d is equal to 2 and k is equal to 10.

9. (Currently Amended) ~~Method~~—The method as claimed in Claim 1, wherein m is equal to 8 and n is equal to 16.

10. (Currently Amended) ~~Method~~—The method as claimed in claim 1, wherein a record carrier ~~(420)~~ is produced by providing a substrate with an information pattern ~~(123, 124)~~ representing the modulated signal ~~(?)~~.

11. (Currently Amended) ~~Coding~~—A device ~~(140)~~ comprising:  
..... an m-to-n bit converter ~~(60)~~ for converting the m-bit information words to n-bit code words; and  
..... means ~~(66, 68)~~ for modulating the n-bit code words to a modulated signal, the modulated signal satisfying a predetermined criterion; and

..... state establishing means ~~(64)~~ for establishing, on the delivery of a code word by the converter, a coding state of a first type ~~(S1)~~ for each of the delivered code words belonging to a group ~~(G11, G12)~~ of a first type determined by the associated group, and one of r coding states ~~(S2, S3)~~ of a second type for each of the delivered code words belonging to a group ~~(G2)~~ of the second type determined by the associated group ~~and~~ and by the information word associated to the delivered code word,

in which the group of the second type comprises at least one code word being associated with at most r information words among which the respective information word is distinguishable by evaluating a predetermined parameter of the following code word,

characterized in that

20 the m-to-n-bit converter ~~(60)~~ comprises:

..... means for providing... for each information word... an associated subset of code words comprising at least r second type of code words mutually differing in a predetermined way;... and

..... means for selecting a code word based on an additional

25 criterion from the subset of code words excluding all code words not complying with said predetermined criterion and, in the event that a coding state of the second type has been established by the preceding code word, excluding all code words having a value of the predetermined parameter not corresponding to the established coding

30 state of the second type.

12. (Currently Amended) ~~Coding~~ The coding device as claimed in claim 11, wherein the ~~coding~~ device further comprises:

..... means ~~(141,142)~~ for recording information on a record carrier ~~(143)~~ by recording an information pattern representing the modulated signal.

13. (Currently Amended) ~~Signal~~ A signal comprising a sequence of successive signal portions ~~(8)~~ each corresponding to an information word, the signal satisfying a predetermined criterion,

in which ~~signal~~ each of the signal portions ~~(8)~~ comprises n bit

5 cells having a first or second signal value, a signal portion

belonging to a group ~~(G11,G12)~~ of a first type of signal portions uniquely representing an information word, and a signal portion

belonging to a group {S2}—of a second type of signal portions in combination with a successive signal portion representing a unique

10 information word, at least one signal portion of the group of the second type being associated with at most r information words among which the respective information word is distinguishable by evaluating a predetermined parameter of the successive signal portion,

15 characterized in that

the signal comprises at least one signal portion selected based on an additional criterion from a subset of signal portions excluding all signal portions not complying with said predetermined criterion and, in the event that the preceding signal portion belongs to the

20 group of the second type, excluding all signal portions having a value of the predetermined parameter not being associated with the respective information word, and

the subset being associated to an information word and comprising at least r signal portions mutually differing in the value of the

25 predetermined parameter.

14. (Currently Amended) ~~Signal—The signal as claimed in claim~~ 13, wherein the additional criterion is a low frequency content of the modulated signal.

15. (Currently Amended) ~~Signal—The signal as claimed in claim~~ 13, wherein the predetermined parameter is the logical value of p predetermined bits.

16. (Currently Amended) ~~Record-A record carrier~~ (120) on which  
a signal (8) as claimed in claim 13 is provided in a track in which  
information patterns (123, 124) represent the signal portions (8),  
which said information patterns comprise comprising first and  
5 second parts (123, 124) alternating in the direction of the track,  
the first parts present presenting detectable first properties and  
the second parts present presenting second properties  
distinguishable from the first properties, and the parts having the  
first properties represent representing bit cells having the first  
10 signal value and the parts having the second properties represent  
representing the bit cells having the second signal value.

17. (Currently Amended) ~~Rendering-A rendering device~~  
comprising:  
..... means for reading information from a track (8) on a record  
carrier, which device comprises:  
5 ..... means for scanning the track; and  
..... demodulation means for retrieving code words from signal  
portions (8) of a signal provided in the track, the signal  
satisfying a predetermined criterion, in which signal each of the  
signal portions (8) comprises n bit cells having a first or second  
10 signal value, a signal portion belonging to a group (G11, G12) of a  
first type of signal portions uniquely representing an information  
word, and a signal portion belonging to a group (G2) of a second

type of signal portions in combination with a successive signal portion representing a unique information word; and

15 .....and a converter for converting the code words into information words, the converter comprising means for distinguishing the respective information word by evaluating a predetermined parameter of the following code word, characterized in that

20 the converter comprises means for converting a code word selected from a subset of code words, the subset being associated to the information word and comprising at least r code words mutually differing in the value of the predetermined parameter.

18. (Currently Amended) ~~Device—The rendering device as claimed~~ in claim 17, wherein the converter comprises means for detecting an additional criterion from the selection of the code word from the subset.